

REMARKS

The following remarks are submitted to address the above amendments and issues raised in the Official Action mailed September 19, 2002. A Request for Extension of Time for one month, extending the time in which to respond to this Official Action to January 21, 2003, along with the appropriate fee, is submitted herewith.

Claims 1-30 are pending in this application. Claims 1-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art in view of U.S. Patent No. 3,182,917 to Tamny et al.

These amendments are made merely to clarify the subject matter of this application. No new matter has been added. Support for requested amendments can be found in the original claims and throughout the present specification and drawings. Applicant respectfully requests consideration of the application in light of the above amendments and the following remarks.

Claims 1-30—35 USC § 103(a)

The rejections of claims 1-30 under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art in view of U.S. Patent No. 3,182,917 to Tamny et al. are respectfully traversed.

Claims 1, 11, 16, and 26 of the present invention, as amended above, claim a wood chipper safety device, a waste reducing device, and a wood chipper comprising “a first elongated structure positioned outside of and adjacent to a *top* of an infeed chute” movable “vertically downward” or “radially towards an opening of the infeed chute”. Claims 11 and 26, as amended above, further claim “a second elongated structure positioned outside of and adjacent to the *top* of the infeed chute . . . movable radially towards the opening of the infeed chute”

(Emphasis added.)

The Official Action states that the admitted prior art is an apparatus including a wood chipper having a powered feed system, a powered cutting system, an infeed chute, and a safety system. The Official Action states that apparently some safety systems are difficult to use and that Tamny et al. solves this problem with a similar apparatus including the use of an elongated bar as part of a safety system. The Official Action states that it would have been obvious for one of ordinary skill in the art to modify the admitted prior art by locating an elongated bar adjacent the infeed chute as part of a safety system for the chipper, as taught by Tamny et al., in order to provide an easy to use safety system. (Official Action, September 19, 2002, page 2.)

Tamny et al. discloses a brush chipper safety control having a cutout means in an electrical coil circuit operable to de-energize a drive motor engine, a brake system operable to arrest rotation of a rotor, a spring means, a means for manually stressing the spring means, a means for releasably retaining the spring means in stressed condition, means for manually actuating the retaining means to release the spring means from stressed condition, and a means for transmitting the energy of the spring release to the cutout means. (Tamny et al., claim 1.) The means for manually actuating the safety control retaining means to release the spring means from stressed condition includes (1) arms 35 and plates 37 at the *sides* 24 of the chute and (2) a supplemental safety actuator 39 comprising bar 43 depending *below* the chute. (Tamny et al., col. 3, lines 44-46; col. 2, lines 42-57; Figs. 1-5 (emphasis added).) Actuation of the safety control is by pressing either plates 37 or bar 43 in the same direction as the direction of brush feed [i.e., horizontally and/or away from the opening of the infeed chute]. (Tamny et al., col. 2, lines 63-66; Figs. 2 and 3.) Bar 43 is positioned below the chute at a location of direct accessibility by the operator's legs, thus affording a control independent of hand or arm actuation. (Tamny et al., col. 2, lines 49-57.)

Nowhere does Tamny et al. disclose an elongated structure positioned adjacent to the *top* of an infeed chute as in claims 1, 11, 16, and 26 of Applicant's invention. Instead, Tawny et al. discloses the means for actuating a safety control as the arms and plates at the *sides* of the chute and the bar depending *below* the chute. Moreover, nowhere does Tamny et al. disclose an elongated structure positioned adjacent to the top of an infeed chute that is movable *vertically downward* or *radially towards the opening* of the infeed chute, as in claims 1, 11, 16, and 26 of the present invention. In contrast, Tamny et al. discloses actuating the safety control by pressing either plates 37 or bar 43 in the same direction as the direction of brush feed, i.e., horizontally and/or away from the opening of the infeed chute. Therefore, Applicant respectfully submits that Tamny et al. does not teach or suggest all the limitations of claims 1, 11, 16, and 26 of the present invention and consequently is deficient as a reference.

According to MPEP § 2142, "[t]he teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." Tawny et al. teaches that bar 43 is positioned below the chute at a location for direct accessibility by the operator's legs. As such, Tawny et al. teaches away from a top-positioned safety device as in claims 1, 11, 16, and 26 of the present invention. Tamny et al. teaches actuating the safety control by moving the plates 37 or bar 43 in the same horizontal direction as the direction of brush feed, and not advantageously vertically downward or radially towards the opening of the infeed chute, as would be the natural reaction of an operator attempting to leverage herself against the first elongated structure to pull herself out of the infeed chute as in the claims 1, 11, 16, and 26 present invention. (See, Specification, page 5, lines 13-19.) In particular, claims 6-10 and 21-25 claim a second elongated structure movable in the *opposite* direction of the feed direction (emphasis added). Applicant respectfully submits

that having to push a safety device actuator in the horizontal feed direction would make self-rescuing efforts of an operator more difficult or ineffective. Additionally, the teaching in Tawny et al. to position a safety device actuator in an unstable, spring-stressed position to be operable teaches away from the simple, one-step, lever-actuated safety device as in the present invention, providing a safety advantage not taught or suggested by Tawny et al. (Tawny et al., col. 1, lines 44-54.) Thus, Applicant respectfully submits that there is no suggestion or motivation in either the admitted prior art or Tamny et al., and therefore it would not have been obvious to one of ordinary skill in the art at the time the invention was made, to modify or combine the respective teachings of these references, to achieve the present invention as in claims 1, 11, 16, and 26. Applicant respectfully submits that neither would there be any reasonable expectation of success to one of ordinary skill in the art to combine the teachings of these references.

The Official Action states that the remaining limitations would have been obvious modifications by one of ordinary skill in the art since they would be design choices, elements known in the art, or solve no stated problems, for example, providing reversible means for the chipper is well known in the art and of no patentable merit. (Official Action, September 19, 2002, pages 2-3.)

Applicant respectfully submits that the combination of an elongated structure positioned adjacent to the *top* of an infeed chute and that is movable *vertically downward* or *radially towards the opening* of the infeed chute, as in claims 1, 11, 16, and 26 of the present invention, is not obvious, as discussed herein. Accordingly, elements in claims depending from these claims are also not obvious. Applicant respectfully requests the examiner provide a reference disclosing a reversing means in combination with an elongated structure positioned outside of

and adjacent to the top of an infeed chute that is movable vertically downward or radially towards the opening of the infeed chute as in claims 1, 11, 16, and 26.

The Official Action states that “‘elongated structure’ can read on almost any structure whatsoever[,] i.e. elongated when compared to what?” (Official Action, September 19, 2002, page 3.) Applicant respectfully submits that “elongated” is defined as “made longer; extended; having more length than width.” (See, The American Heritage Dictionary of the English Language, Third Edition, 1996.) Thus, in the present invention, an elongated structure means a structure that is longer than wide. For example, in the present invention, an elongated structure comprises a structure that is longer than wide, such as a bar, rod, or handle, and can be rigid, or non-rigid and substantially non-extensible, such as a chain, cable, or rope. (Specification, pages 3-4, paragraph 11.)

Applicant respectfully submits that the combination of features as claimed in claims 1, 11, 16, and 26 are allowable over the art of record. Claims 2-10 depend from claim 1; claims 12-15 depend from claim 11; claims 17-25 depend from claim 16; and claims 27-30 depend from claim 26. Therefore, these dependent claims are also not obvious in view of the admitted prior art with respect to Tamny et al.

For all of these reasons, the Office is respectfully requested to withdraw the rejections of claims 1-30 under 35 USC §103 (a).

Version With Markings To Show Changes Made

Amendments in the Claims

In accordance with 37 CFR 1.121(c), the following version of the claims as rewritten by the foregoing amendments show all the changes made relative to the previous versions of the claims, with additions underlined and deletions [bracketed].

1. (Amended) A wood chipper safety device, comprising:

a first elongated structure positioned outside of and adjacent to a top of an infeed chute of a wood chipper, wherein the first elongated structure is movable vertically downward between a plurality of positions; and

an actuator operably connected to the first elongated structure, the actuator having a plurality of operable positions corresponding to the plurality of positions of the first elongated structure.

6. (Amended) The wood chipper safety device of claim 1, further comprising a second elongated structure positioned outside of and adjacent to the top of the infeed chute of the wood chipper, wherein the actuator is operably connected to the second elongated structure and wherein the second elongated structure is movable opposite [the] a feed direction of the wood chipper between a plurality of positions.

11. (Amended) A wood chipper safety device, comprising:

a first elongated structure positioned outside of and adjacent to a top of an infeed chute of a wood chipper, wherein the first elongated structure is movable radially towards an opening of the infeed chute between a plurality of positions;

a second elongated structure positioned outside of and adjacent to the top of the infeed chute of the wood chipper, wherein the second elongated structure is movable radially towards the opening of the infeed chute between a plurality of positions;

an actuator operably connected to the first elongated structure and the second elongated structure, the actuator having a plurality of operable positions corresponding to the plurality of positions of the first elongated structure and the plurality of positions of the second elongated structure; and

a linkage operably connecting the actuator to the first elongated structure and the second elongated structure.

16. (Amended) A waste reducing device having a powered feed system, a powered cutting system, and an infeed chute, the waste reducing device comprising:

a first elongated structure positioned outside of and adjacent to a top of the infeed chute, wherein the first elongated structure is movable vertically downward between a plurality of positions; and

an actuator operably connected to the first elongated structure, the actuator having a plurality of operable positions corresponding to the plurality of positions of the first elongated structure.

21. (Amended) The waste reducing device of claim 16, further comprising a second elongated structure positioned outside of and adjacent to the top of the infeed chute, wherein the actuator is operably connected to the second elongated structure and wherein the second elongated structure is movable opposite [the] a feed direction of the waste reducing device between a plurality of positions.

26. (Amended) A wood chipper having a powered feed system, a powered cutting system, and an infeed chute, the wood chipper comprising:

a first elongated structure positioned outside of and adjacent to a top of the infeed chute, wherein the first elongated structure is movable radially towards an opening of the infeed chute between a plurality of positions;

a second elongated structure positioned outside of and adjacent to the top of the infeed chute, wherein the second elongated structure is movable radially towards the opening of the infeed chute between a plurality of positions;

an actuator operably connected to the first elongated structure and the second elongated structure, the actuator having a plurality of operable positions corresponding to the plurality of positions of the first elongated structure and the plurality of positions of the second elongated structure; and

a linkage operably connecting the actuator to the first elongated structure and the second elongated structure.

Amendments in the Specification:

In accordance with 37 CFR § 1.121(b), the following replacement paragraphs show all the changes made by the foregoing amendments relative to the previous versions of the paragraphs. Material added is shown in underlined text, and material deleted is shown in [brackets].

In paragraph 0001 on page 1 of the Specification:

Please delete the first sentence from paragraph 0001, and place the sentence in a new section entitled “FIELD OF THE INVENTION” just prior to the “BACKGROUND OF THE INVENTION” section, as follows:

FIELD OF THE INVENTION

The present invention relates generally to a controlled feed device having an associated safety device and, more specifically, to a waste reducing device, such as a wood chipper, having an infeed chute safety device.

BACKGROUND OF THE INVENTION

[0003] [The present invention relates generally to a controlled feed device having an associated safety device and, more specifically, to a waste reducing device, such as a wood chipper, having an infeed chute safety device.]Wood chippers are used to reduce branches, trees, brush, and other bulk wood products into small wood chips. A wood chipper typically includes an infeed chute, a feed system for controlling the feed rate of wood products into the chipper, a wood chipping mechanism, a drive system for powering the feed system and the chipping mechanism, and a discharge chute. The infeed chute is typically a funnel-shaped conduit with a wide opening which tapers towards the feed system, converging the wood products towards the chipping mechanism. Through the operation of the feed system, wood

products are brought into contact with the chipping mechanism, which grinds, flails, or cuts the wood products into small pieces. These wood chips are propelled into the discharge chute and expelled from the wood chipper. Wood chippers, if operated incorrectly, are potentially dangerous devices. The chipping mechanism typically rotates at high speeds, producing the high torque necessary to chip wood products. The feed system, located at the narrowest point of the infeed chute, is a dangerous area which may catch an operator's clothing or, more importantly, an operator's limb if he or she improperly reaches into the infeed chute during operation of the wood chipper.

In paragraph 0012, lines 13 and 16 on page 5, of the Specification:

Please delete the space between "there" and "between" and change "themselves" to --oneself-- as follows:

[0004] The first elongated structure 36 and the second elongated structure 42 are operably connected to an actuator 56 which controls the powered feed and cutting systems of the wood chipper 10. Typically, these systems are hydraulically operated and controlled, however other operational systems may be utilized. The actuator 56 has a plurality of operable positions corresponding to the plurality of positions of the first elongated structure 36 and the second elongated structure 42. The actuator 56 may have a first operable position corresponding to a first position 57 (Fig. 3) of the first elongated structure 36 and a first position 59 (Fig. 3) of the second elongated structure 42, the first operable position of the actuator 56 permitting motive operation of the powered feed and cutting systems of the wood chipper 10. The actuator 56 may also have a second operable position corresponding to a second position of the first elongated structure 36 and a second position of the second elongated structure 42, the second operable

position of the actuator 56 interrupting motive operation of the powered feed and cutting systems of the wood chipper 10. The actuator 56 may further have a third operable position corresponding to a third position 61 (Fig. 3) of the first elongated structure 36 and a third position 63 (Fig. 3) of the second elongated structure 42, the third operable position of the actuator 56 reversing motive operation of the powered feed and cutting systems of the wood chipper 10. Although three positions are discussed, there may be fewer or more positions but including a first, motive, position and one of a second stop or reverse position. As such, the elongated structures 36 and/or 42 may be rotated from a first position 57 and 59, which allows motive operation, to a third position 61 and 63, which reverses motive operation, with a second position that stops motive operation positioned there[]between. So, for example, an operator grabbing the first elongated structure 36 from within the infeed chute 20 simply pulls the first elongated structure 36 downward and rotationally inward, as would be the natural reaction of one trying to leverage [themselves] oneself against the first elongated structure 36 to pull [themselves] oneself out of the infeed chute 20. Similarly, an observer outside of the infeed chute 20 may push or pull the second elongated structure 42 rotationally inward, toward the opening 38 of the infeed chute 20 to stop or reverse the motive operation. Thus, by varying the position of the first elongated structure 36 and the second elongated structure 42, and thereby varying the operable position of the actuator 56, the operable state of the wood chipper 10 may be varied.

Conclusion

Applicant submits that a full and complete response has been made herein to the Official Action and, as such, all pending claims in this application are now in condition for allowance. Therefore, Applicant respectfully requests early consideration of the present application, entry of all amendments herein requested, withdrawal of all rejections, and allowance of all pending claims.

The Office is respectfully invited to contact J. Michael Boggs at (336) 747-7536, to discuss any matter relating to this application.

Respectfully submitted,

1/21/03
Date

J. Michael Boggs
J. Michael Boggs
Reg. No. 46,563

Kilpatrick Stockton LLP
1001 West Fourth Street
Winston-Salem, NC 27101
(336) 747-7536
(336) 734-2632 (facsimile)